

## Device for distance measurement

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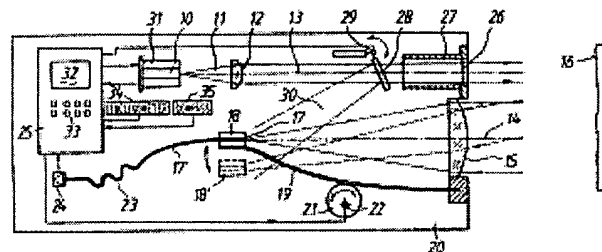
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Abstract not available for DE4316348

Abstract of corresponding document: **US5815251**

PCT No. PCT/EP94/01412 Sec. 371 Date Nov. 15, 1995 Sec. 102(e) Date Nov. 15, 1995 PCT Filed May 4, 1994 PCT Pub. No. WO94/27164 PCT Pub. Date Nov. 24, 1994A device for measuring distance with a visible measuring beam (11) generated by a semiconductor laser (10), a collimator object lens (12) to collimate the measuring beam towards the optical axis (13) of the collimator object lens (12), a radiation arrangement to modulate the measuring radiation, a reception object lens (15) to receive and image the measuring beam reflected from a distant object (16) on a receiver, a switchable beam deflection device (28) to generate an internal reference path between the semiconductor laser (10) and the receiver and an electronic evaluation device (25) to find and display the distance measured from the object. According to the invention, the receiver contains a light guide (17') with a downstream opto-electronic transducer (24), in which the light guide inlet surface (17) is arranged in the imaging plane of the reception object lens (15) for long distances from the object and can be controllably moved (18') from this position (18) transversely to the optical axis (14). In an alternative embodiment, the light inlet surface (17) is fixed and there are optical means (36) outside the optical axis (14) of the reception object lens (15) which, for short object distances, deflect the imaging position of the measuring beam to the optical axis (14) of the reception object lens (15). The measuring radiation is pulse modulated with



excitation pulses with a pulse width of less than two nanoseconds.

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